Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): An apparatus for making a cooling device, the cooling device comprising a heat sink and a heat pipe integrally formed with the heat sink, the heat sink comprising a base and a plurality of fins, the apparatus comprising:

a mold, comprising a base part and a pair of symmetrical forming parts slidably engaged on ~~he~~ the base part, each of the forming parts defining a plurality of slots corresponding to the fins of the heat sink, a cavity at endmost portions of the slots corresponding to the base of the heat sink, and a recess in communication with the cavity corresponding to the heat pipe, wherein one portion of the recess extends transversely the slots; and

a core accommodated in the recess of the forming parts.

Claim 2 (original): The apparatus as claimed in claim 1, wherein each of the forming parts further defines a chamber adjacent the slots, and the chamber is in communication with ends of the recess.

Claim 3 (original): The apparatus as claimed in claim 2, wherein each of the forming parts further defines a sprue and a conduit connecting between the sprue and the cavity, the sprue being for feeding molten material into the mold, the conduit being for conveying molten material from the sprue to the cavity.

Claim 4 (original): The apparatus as claimed in claim 3, wherein each of the forming parts further defines a well above and in communication with the slots, for air venting when the mold is filled with molten material and for providing surplus molten material needed when molten material in the slots solidifies and shrinks during a molding process.

Claim 5 (original): The apparatus as claimed in claim 1, wherein the base part defines a pair of grooves in a top face thereof, and each of the forming parts comprises a pair of slide blocks slidably engaged in the grooves.

Claim 6 (previously presented): The apparatus as claimed in claim 2, wherein the core comprises a generally U-shaped main body and a peripheral portion integrally adjoining ends of the main body, the main body is accommodated in the recesses of the forming parts, and the peripheral portion is accommodated in the chambers of the forming parts.

Claim 7 (original): The apparatus as claimed in claim 6, wherein the core is made of water-soluble material.

Claim 8 (original): The apparatus as claimed in claim 6, wherein the core is made of sand.

Claim 9 (original): The apparatus as claimed in claim 6, wherein the core is made of metal pipe.

Claim 10 (currently amended): A method for making a cooling device, the cooling device comprising a heat sink and a heat pipe integrally formed with the heat sink, the heat sink comprising a base and a plurality of fins, the method comprising the steps of:

a) providing a mold for making the cooling device, the mold comprising a base part and a pair of forming parts slidably engaged on the base part, the forming parts defining a void therebetween corresponding to a configuration of the cooling device;

b) providing a core corresponding to the heat pipe of the cooling device, the core comprising a main body and a peripheral portion adjoining ends of the main body;

c) attaching the core to one of the forming parts;

d) closing the mold, with the two forming parts being slidingly moved toward each other;

e) feeding molten material into the mold;

f) allowing the molten material to cool;

g) opening the mold, with the two forming parts being slidingly moved apart, and taking out a preform of the cooling device from the mold;

h) removing the core;

i) removing by-products formed as part of the preform;

j) sealing one end of the heat pipe being part to the preform;

k) filling working liquid into the heat pipe via ~~the~~ an unsealed end thereof; and

l) sealing the unsealed end of the heat pipe.

Claim 11 (currently amended): The method as claimed in claim 10, further comprising the step of filling capillary material into the heat pipe via the ~~other~~ unsealed end thereof before step k).

Claim 12 (original): The method as claimed in claim 10, further comprising the step of evacuating air from the heat pipe before step l).

Claim 13 (original): The method as claimed in claim 10, wherein the core is made of water-soluble material, and step h) comprises soaking the preform in water to dissolve the core and thereby provide the heat pipe.

Claim 14 (original): The method as claimed in claim 10, wherein the core is made of sand, and step h) comprises scouring the core with high-pressure water to break the core into pieces and wash the sand away and thereby provide the heat pipe.

Claim 15 (original): The method as claimed in claim 10, wherein the core is made of metal pipe, and step h) comprises cutting the peripheral portion away from the preform and thereby provide the heat pipe.

Claims 16-18 (canceled)

Claim 19 (new): An apparatus for making a cooling device, the cooling device comprising a heat sink and a heat pipe integrally formed with the heat sink, the heat sink comprising a base and a plurality of fins, the apparatus comprising:

a mold, comprising a base part and a pair of symmetrical forming parts slidably engaged on the base part, each of the forming parts defining a plurality of slots corresponding to the fins of the heat sink, a cavity at endmost portions of the slots corresponding to the base of the heat sink, and a recess in communication with the cavity corresponding to the heat pipe, wherein one portion of the recess extends transversely the slots; and

a core accommodated in the recess of the forming parts;

wherein each of the forming parts further defines a chamber adjacent the slots, and the chamber is in communication with ends of the recess; and

wherein the core comprises a generally U-shaped main body and a peripheral portion integrally adjoining ends of the main body, the main body is accommodated in the recesses of the forming parts, and the peripheral portion is accommodated in the chambers of the forming parts.

Claim 20 (new): The apparatus as claimed in claim 19, wherein each of the forming parts further defines a sprue and a conduit connecting between the sprue and the cavity, the sprue being for feeding molten material into the mold, the conduit being for conveying molten material from the sprue to the cavity.

Claim 21 (new): The apparatus as claimed in claim 20, wherein each of the

forming parts further defines a well above and in communication with the slots, for air venting when the mold is filled with molten material and for providing surplus molten material needed when molten material in the slots solidifies and shrinks during a molding process.

Claim 22 (new): The apparatus as claimed in claim 19, wherein the base part defines a pair of grooves in a top face thereof, and each of the forming parts comprises a pair of slide blocks slidably engaged in the grooves.

Claim 23 (new): The apparatus as claimed in claim 19, wherein the core is made of water-soulable material.